AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for improving contact hole patterning in a liquid crystal display (LCD) panel, the liquid crystal display panel comprising a substrate, a conductive layer positioned on the substrate surface, and a dielectric layer disposed on the conductive layer, the method comprising the following steps:

forming a photoresist layer on the dielectric layer, the photoresist layer having an opening extending through to the surface of the dielectric layer;

performing an etching process to remove parts of the dielectric layer along the opening to form a contact hole extending to the surface of the conductive layer;

performing a post treatment process to form a protective layer under the contact hole covering the surface of the conductive layer; and

stripping the photoresist layer with a base solution.

2. (Original) The method of the claim 1 wherein the method further comprises removing the protective layer after stripping the photoresist layer.

3. (Original) The method of the claim 1 wherein the method forms a data bus line on the dielectric layer after stripping the photoresist layer, and parts of the data bus line are filled into the contact hole and electrically connected to the conductive layer.

4. (Original) The meth d f the claim 1 wherein a contact plug is formed in the contact hole after stripping the photoresist layer.

5. (Original) The method of the claim 4 wherein the contact plug is used to electrically connect a driving transistor and a data bus line of the liquid crystal display panel.

6. (Original) The method of the claim 1 wherein the etching process is a dry etching process.

7. (Original) The method of the claim 1 wherein the etching process is a wet etching process.

8. (Original) The method of the claim 1 wherein the post treatment process comprises radiating the surface of the conductive layer with ultraviolet (UV) light.

9. (Original) The method of the claim 1 wherein the post treatment process comprises washing the surface of the conductive layer with an ozone solution to form the protective layer.

10. (Original) The method of the claim 1 wherein the post treatment process is a thermal oxidation process.

11. (Original) The method of the claim 1 wherein the post treatment process comprises exposing the conductive layer to the atmosphere for at least 6 hours to oxidize the surface of the conductive layer and form the protective layer.

12. (Original) The method of the claim 1 wherein the post treatment process comprises oxidizing the surface of the conductive layer with oxygen plasma to form the protective layer.

13. (Original) The method of the claim 1 wherein the conductive layer is a polysilicon layer.

14. (Original) The method of the claim 1 wherein the conductive layer is an amorphous silicon layer.

15. (Original) The method of the claim 1 wherein the protective layer is a silicon oxide layer.

16. (Canceled) The method of the claim 1 wherein a base solution is used to strip the photoresist layer.

17. (Original) The method of the claim 1 wherein the protective layer is used to protect the conductive layer from damage while the photoresist layer is stripped.

18. (Original) The method of the claim 1 wherein the conductive layer is used as a source or a drain of a driving transistor of the liquid crystal display panel.

19. (Original) The method of the claim 1 wherein the thickness of the protective layer is less than 100 angstroms.

20. (Currently amended) A method for improving contact hole patterning in a semiconductor wafer, the semiconductor wafer comprising a substrate, a conductive layer positioned on the substrate surface, and a dielectric layer disposed on the conductive layer, the method comprising the following steps:

forming a photoresist layer on the dielectric layer, the photoresist layer having an opening extending through to the surface of the dielectric layer;

performing an etching process to remove parts of the dielectric layer along the opening to form a contact hole extending to the surface of the conductive layer;

performing a post treatment process to form a protective layer under the contact hole covering the surface of the conductive layer; and

stripping the photoresist layer with a base solution.

21. (Original) The method of the claim 20 wherein the method further comprises removing the protective layer after removing the photoresist layer.

22. (Original) The method of the claim 20 wherein the method forms a data bus line on the dielectric layer after stripping the photoresist layer, and parts of the data bus line are filled into the contact hole and electrically connected to the conductive layer.

23. (Original) The method of the claim 20 wherein a contact plug is formed in the contact hole after stripping the photoresist layer.

24. (Original) The method of the claim 20 wherein the method further comprises forming a gate on the semiconductor wafer before forming the photoresist layer.

25. (Original) The method of the claim 20 wherein the gate is a metal gate.

26. (Original) The method of the claim 20 wherein the etching process is a dry etching process.

27. (Original) The method of the claim 20 wherein the etching process is a wet etching process.

28. (Original) The method of the claim 20 wherein the post treatment process comprises radiating the surface of the conductive layer with ultraviolet (UV) light to form the protective layer.

29. (Original) The method of the claim 20 wherein the post treatment process comprises washing the surface of the conductive layer with an ozone solution to form the protective layer.

30. (Original) The method of the claim 20 wherein the post treatment process is a thermal oxidation process.

31. (Original) The method of the claim 20 wherein the post treatment process comprises oxidizing the surface of the conductive layer with oxygen plasma to form the protective layer.

32. (Original) The method of the claim 20 wherein the post treatment process comprises exposing the conductive layer to the atmosphere for at least 6 hours to oxidize the surface of the conductive layer and form the protective layer.

33. (Original) The method of the claim 20 wherein the conductive layer is a polysilicon layer.

34. (Original) The method of the claim 20 wherein the protective layer is a silicon oxide layer.

35. (Canceled) The method of the claim 20 wherein a base solution is used to strip the photoresist layer.

36. (Original) The method of the claim 20 wherein the conductive layer is used as a source or a drain of a driving transistor of the liquid crystal display panel.